

Automation 9 - Group Scenario (FQP)

Copyright note

Be who you want to be, thanks

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Introduction

We have a way forward in the world of Quark



1

ACCA Regression KC (FQP Support)

1 Knowledge Section

Test Content



Activity 1: Test Activity

Colour of Flag

Required

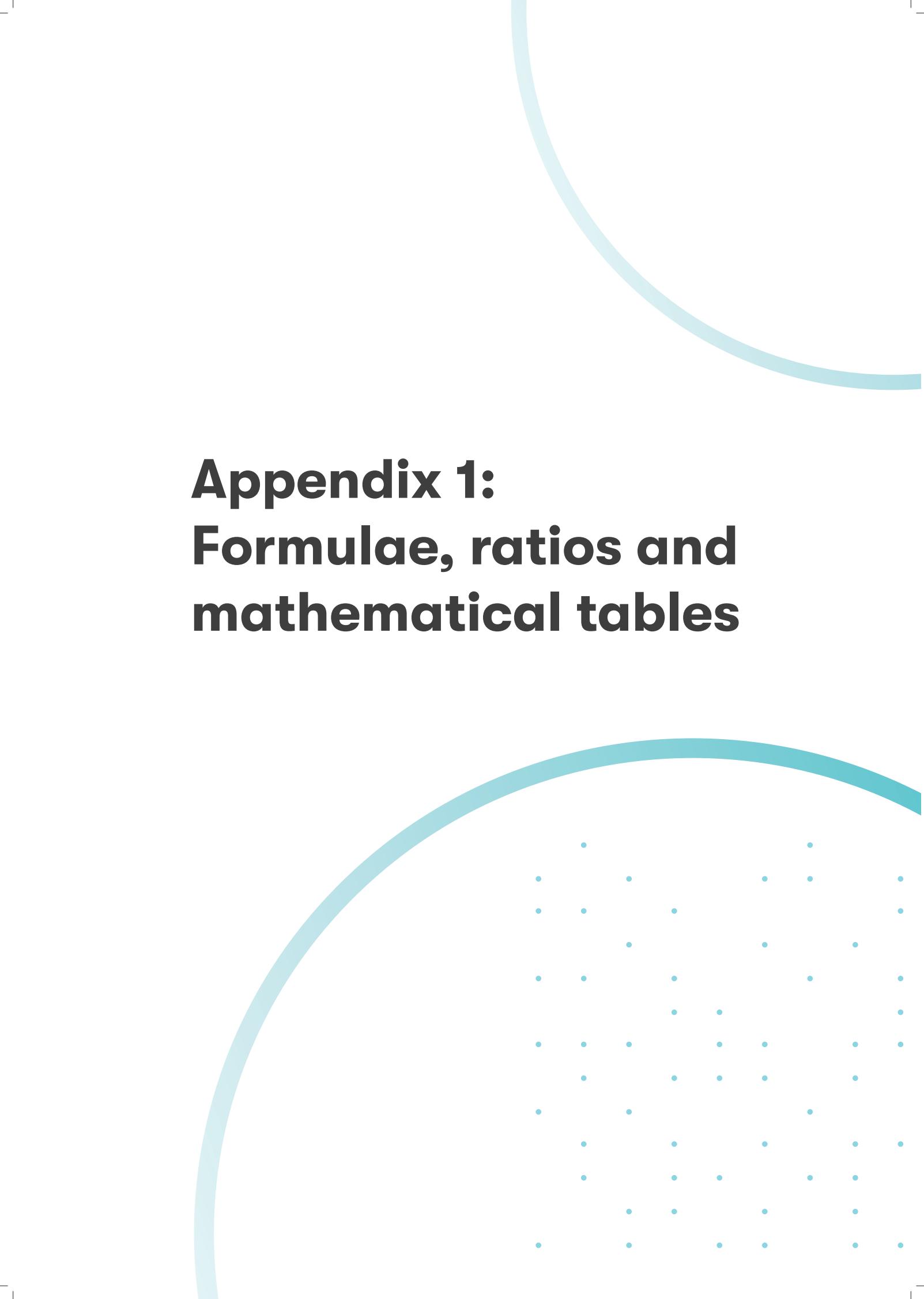
What is the colour of the Nigerian Flag?

Solution

Activity answers

Activity 1: Test Activity

Green White Green



Appendix 1: Formulae, ratios and mathematical tables

Appendices

Appendix A: Formulae and ratios that you need to learn

Profitability ratios:

$$\text{ROCE} = \frac{\text{Profit from operations (before interest and tax)}}{\text{Capital employed}}$$

Debt ratios include:

$$\text{Gearing} = \frac{\text{Value of debt}}{\text{Value of equity (or debt + equity)}}$$

$$\text{Interest cover} = \frac{\text{Profit from operations}}{\text{Interest}}$$

Liquidity ratios:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Shareholder investor ratios include:

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Share price}} \times 100$$

$$\text{Earnings per share (EPS)} = \frac{\text{Profits after tax - preference dividend}}{\text{Number of ordinary shares}}$$

$$\text{Price to earnings ratio (P/E)} = \frac{\text{Share price}}{\text{EPS}}$$

Working capital ratios

Operating cycle = inventory days + receivable days – payables days

Inventory days = inventory/cost of sales × 365

Receivables days = trade receivables/(credit) sales × 365

Payables days = trade payables/(credit) purchases × 365

Sales to net working capital ratio = sales/net working capital (excl cash)

Cost of capital formulae:

$$K_d = \frac{I(1 - t)}{P_0}$$

$$K_p = \frac{d}{p}$$

Other useful formulae to learn:

$$IRR = a\% + \left[\frac{NPV_a}{NPV_a - NPV_b} \times (b\% - a\%) \right]$$

$$\text{Total shareholder return} = \frac{\text{dividend gain} + \text{capital}}{\text{share price at start year}}$$

$$EAC = \frac{\text{NPV of costs}}{\text{Annuity factor for life of the project}}$$

$$\text{Profitability index} = \frac{\text{Present value of cash inflows (or NPV of the project)}}{\text{Present value of cash outflows}}$$

Appendix B: Mathematical tables

Present Value Table

Annuity Table

Formula Sheet

Economic Order Quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller-Orr Model

$$\text{Return point} = \text{Lower limit} + \left(\frac{1}{3} \times \text{spread}\right)$$

$$\text{Spread} = 3 \left| \frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{Interest rate}} \right|^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(n) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1-T))} \beta_e \right] + \left[\frac{V_d(1-T)}{(V_e + V_d(1-T))} \beta_d \right]$$

The Growth Model

$$P_0 = \frac{D_0(1+g)}{(r_e - g)} \quad r_e = \frac{D_0(1+g)}{P_0} + g$$

Gordon's Growth Approximation

$$g = br$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d} \right] k_e + \left[\frac{V_d}{V_e + V_d} \right] k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing Power Parity and Interest Rate Parity

$$S_1 = S_0 \times \frac{(1 + h_c)}{(1 + h_b)} \quad F_0 = S_0 \\ \times \frac{(1 + i_c)}{(1 + i_b)}$$

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2. Error Code: -43 - File not found. 0420 Annuity Table.eps

